Claims:

1. Compound of general formula I

$$R_5$$
 R_1
 R_2
 R_1

in which R_1 to R_6 , which are the same or different, mean hydrogen, OH-, -OD or -OR₇, in which R_7 is a C_1 to C_3 -alkyl group or a C_2 to C_4 -carboxyl group, provided that at least four (4) of the substituents R_1 to R_6 have a meaning different from hydrogen.

- 2. Compound according to claim 1, characterized in that R_7 is selected from the group that consists of methoxy, ethoxy and propoxy.
- 3. Compound according to claim 1 or 2, wherein R_7 is selected from the group that consists of formate and acetate.
- 4. Compound according to one of claims 1 to 3, wherein five (5) of the substituents R_1 to R_6 have a meaning different from hydrogen.
- 5. Compound according to one of claims 1 to 3, wherein six (6) of the substituents R_1 to R_6 have a meaning different from hydrogen.
- 6. Compound according to one of claims 1 to 3, in which R₁, R₂, R₃ and R₅ have a meaning different from hydrogen.
 - 7. Compound according to claim 6, namely 3,3',4,4',5,5'-hexamethoxystilbene.
- 8. Compound according to one of claims 1 to 3, in which R_1 , R_3 , R_4 and R_6 have a meaning other than hydrogen.
 - 9. Compound according to claim 8, namely 3,3',5,5'-tetrahydroxystilbene.

- 10. Compound according to one of claims 1 to 3, in which R₁, R₃, R₄, and R₅ have a meaning different from hydrogen.
 - 11. Compound according to claim 10, namely 3,3',4',5-tetrahydroxystilbene.
- 12. Compound according to one of claims 1 to 3, in which R_1 , R_2 , R_3 , R_4 and R_5 have a meaning different from hydrogen.
 - 13. Compound according to claim 12, namely 3,3',4,4',5-pentahydroxystilbene.
- 14. Compound according to one of claims 1 to 3, in which R_1 , R_2 , R_3 , R_4 and R_6 have a meaning different from hydrogen.
 - 15. Compound according to claim 14, namely 3,3',4,5,5'-pentahydroxystilbene.
- 16. Compound according to one of claims 1 to 3, in which R_1 , R_2 , R_3 , R_5 and R_6 have a meaning different from hydrogen.
 - 17. Compound according to claim 16, namely 3,4,4',5,5'-pentahydroxystilbene.
- 18. Compound according to one of claims 1 to 3, in which R_1 , R_3 , R_4 , R_5 and R_6 have a meaning different from hydrogen.
 - 19. Compound according to claim 18, namely 3,3',4',5,5'-pentahydroxystilbene.
- 20. Compound according to one of claims 1 to 3, wherein R_1 to R_6 have a meaning different from hydrogen.
 - 21. Compound according to claim 20, namely 3,3',4,4',5,5'-hexahydroxystilbene.
 - 22. Compound according to claim 20, namely 3,3',4,4',5,5'-hexamethoxystilbene.
- 23. Pharmaceutical agents containing at least one of the compounds according to one of claims 1 to 22.
- 24. Pharmaceutical agents containing at least one of the compounds according to one of claims 1 to 22 as free-radical scavengers.

- 25. Pharmaceutical agents according to claim 24 containing 3,3',4,4',5,5'-hexahydroxystilbene and/or 3,3',4,4',5,5'-hexamethoxystilbene.
- 26. Pharmaceutical agents with anti-tumor action containing at least one compound of claims 1 to 22.
- 27. Pharmaceutical agents according to claim 26 containing 3,3',4,4',5,5'-hexahydroxystilbene and/or 3,3',4,4',5,5'-hexamethoxystilbene.
- 28. Pharmaceutical agents containing at least one of the compounds of claims 1 to 22 as selective cyclooxygenase-2 inhibitors.
- 29. Pharmaceutical agents according to claim 28 containing 3,3',4,4',5,5'-hexahydroxystilbene and/or 3,3',4,4',5,5'-hexamethoxystilbene.
- 30. Use of at least one compound of claims 1 to 22 for the production of pharmaceutical agents with free-radical scavengers, anti-tumor and cyclooxygenase-2 inhibiting action.